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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/822,758

04/13/2004

Jin Woong Kim

2832-0177PUS1

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2292 7590 08/23/2007
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EXAMINER

HECKERT, JASON MARK

ART UNIT

PAPER NUMBER

1746

NOTIFICATION DATE

DELIVERY MODE

08/23/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/822,758	Applicant(s) KIM ET AL.	
	Examiner Jason Heckert	Art Unit 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/30/06, 5/2/06</u></p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application</p> <p>6) <input type="checkbox"/> Other: _____</p> |
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DETAILED ACTION

Double Patenting

1. Claims 1, 14, 27 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 21 of copending Application No. 11/723661. Although the conflicting claims are not identical, they are not patentably distinct from each other. The current application discloses a washing step and a steam supplying step, wherein steam is created by a heater and then injected into the machine. Water is circulated in the machine. The copending application discloses a washing machine with a steam injection step and the circulating of water inside the machine. A washing machine inherently possesses a wash step. Furthermore, although the current application discloses a water source and a heater, these are two essential components in the creation of steam and are thereby rendered obvious. The current application's claims fully encompass the limitations of the cited claims in the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 6 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 6 is very confusing, especially in view of the

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specification on page 15 line 13. How is the tank 66, where steam is generated, determined to be sufficiently full when the water reaches a minimum reset level in the tub? Also, the phrase water supply line is especially confusing because there is water supply to the steam generator as well as the tub. Clarifying these steps throughout the claims would allow for better understanding of the invention, without changing the scope.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1, 24-35 rejected under 35 U.S.C. 102(b) as being anticipated by Sulzmann in GB 799,788. Sulzmann discloses a washing step as well as a steam supplying step for a washing machine. The steam supply is used during washing to maintain a desired temperature (page 3 line 20-60). Sulzmann also discloses a first wetting step, wherein the water level is lower than the final level. More fluid is then added during the washing step (page 3 lines 64-71). Water addition is based on predetermined values for washing. Water and steam are supplied to the tub at the same time. Sulzmann discloses using a control scheme with a thermometer in order to control steam generation (page 3 line 117- 130). Steam injection ceases when the wash water reaches a predetermined temperature. Steam is generated and inputted for

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a predetermined time. Water is circulated throughout the tub continuously. Heating means are disclosed for the steam generator.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Sulzmann. Sulzmann does not disclose supplying wash water from a top portion of the tub, however this is known in the art and not considered to be a patentably distinct feature. It would have been obvious at the time of the invention to modify Sulzmann, and supply water from the top of the tub, as it is a known method of water supply in the art.

8. Claim 3-23 rejected under 35 U.S.C. 103(a) as being unpatentable over Sulzmann in view of Nakamura et al. (Nakamura). It could be argued that Sulzmann's disclosure anticipates claim 3, in that a heater is disclosed, and that the tub and pipe read on a tank in the broadest sense. However, a separate tank for the creation of steam with a heating element is known, as shown by Nakamura (see abstract). In regards to claim 4, the inclusion of a level sensor and monitoring water level in a steam generator is not considered to be a patentably distinct feature. If the heating element is not submerged, the device can malfunction. One of ordinary skill in the art would see this as scenario that would be desirable to avoid, and a water level sensor is a known device that can ensure that the heating element is submerged and that the water is

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limited to a predetermined level. In regards to claims 5-6, 15-16 Sulzmann already discloses supplying steam while water is supplied to the tub. Nakamura discloses that when the conditions are sufficient, such as temperature and pressure, steam is injected, as well as simultaneously stopping the supply of steam when the water supply is stopped when water is at a certain level. Steam generation can also continue after operation of the heater has ceased, due to the fact that conditions inside the generator allow for the release of remaining steam. In regards to claims 7 and 17, water is resupplied to Nakamura's generator at a variety of temperatures, any of them readable on predetermined. As stated previously, inclusion and operation of a water level sensor is not a patentably distinct feature. In regards to claims 8 and 18, shutting off the heater, and therefore eliminating the production of more steam, would be a desirable feature to one skilled in the art due to the fact that too much pressure could cause the device to malfunction. Sulzmann already discloses a pressure regulation gauge (page 4 line 18-22). In regards to claims 10-13 and 19-23, Sulzmann already discloses said control features, as stated above. It would have been obvious at the time of the invention to substitute the steam generation means of Nakamura in place of Sulzmann's steam generation unit, as it is a functionally equivalent device that was known at the time of the invention that creates steam for injection into a washing machine.

Conclusion

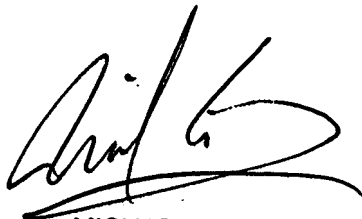
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Heckert whose telephone number is (571) 272-2702. The examiner can normally be reached on Mon. to Friday, 8:00 - 5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMH



MICHAEL BARR
SUPERVISORY PATENT EXAMINER